

CHEM 1423
Chapters 17
Homework Answers

TEXTBOOK HOMEWORK

17.29 Not at equilibrium. Will move towards left

17.38 28.2 atm

17.41 1.61×10^{-3} M

17.44 $[I_2] = [Cl_2] = 0.020$ M $[ICl] = 0.060$ M

17.46 6.0×10^{-6}

17.47 $P_{CO} = 0.713$ atm , $P_{CO_2} = 0.287$ atm

17.56 (a) Move to right. No change in K
(b) Move to right. No change in K

17.61 (a) Move to right. K will increase
(b) Move to right. K will increase
(c) Move to right. K will increase
(d) Move to left. K will decrease

SUPPLEMENTARY HOMEWORK

S1. D

S2. C

S3. D

S4. E

S5. C

S6. $[NH_3]/[H_2]$ will
(a) Increase
(b) Remain the same
(c) Decrease
(d) Increase
(e) Increase. In addition, K_c will increase

S7. 0.66

S8. 0.16

S9. 0.88 M

S10. 4500

S11. (a) $\Delta H^\circ = -41.4 \text{ kJ/mol}$
(b) $K_c = 22.4$
(c) $T = 620 \text{ }^\circ\text{C}$

S12. 0.0067 M

S13. 39.